

PATENT CLAIMS

1. An active part for a surge arrester having two connecting fittings (10, 20) which are arranged along an axis (z) at a distance from one another, having at least one cylindrical varistor column (30), which is provided between the two connecting fittings (10, 20), and having at least one dielectric loop (40, 41, 42, 43, 411, 412), which is supported on the two connecting fittings (10, 20) or on one of the two connecting fittings (10, 20) and a connection piece (31), which is arranged between the two connecting fittings (10, 20) in the varistor column (30), and holds together the varistor column (30) or a section of the varistor column (30), which is bounded by the supporting connecting fitting (10, 20) and the connection piece (31), thus forming a contact force, characterized in that at least one of the two connecting fittings (10, 20) has an electrode, which is arranged at right angles to the axis (z) and is in the form of a plate (11, 12), as well as an electrical connection (12, 22), which is integrally formed on the plate (11, 12), and means for supporting one end of the dielectric loop (40, 41, 42, 43, 411, 412), which means are formed in the plate (11, 12) and/or are integrally formed at the edge of the plate (11, 12).
2. The active part as claimed in claim 1, characterized in that the electrical connection (12, 22) is flat.
3. The active part as claimed in claim 2, characterized in that the electrical connection (12, 22) is in the form of a perforated plate or a plug-in contact.
4. The active part as claimed in one of claims 1 to 3, characterized in that an axially symmetrical centering tab (15, 25) projects from a surface of the plate (11, 21) facing the varistor column (30) and is used to guide at least one cup spring (16, 26) which is in the form of a conical annular disk.

5. The active part as claimed in claim 4, characterized in that the diameter of the centering tab (15, 25) and the internal diameter of the annular disk are matched to one another so as to prevent the cup spring (16, 26) from being pressed flat.
6. The active part as claimed in one of claims 1 to 5, characterized in that the supporting means have at least one shoulder (131, 132, 231, 232) which is integrally formed at the edge of the plate (11, 21) and is narrower than the diameter of the varistor column (30).
7. The active part as claimed in one of claims 1 to 5, characterized in that the supporting means have a shoulder (200, 201) which is formed in the plate (11, 21) and passes through the axis (z) of the varistor column (30).
8. The active part as claimed in one of claims 1 to 5, characterized in that the supporting means have two shoulders (13, 14, 23, 24) which are formed in the plate (11, 21) and are each arranged in one of two sections of the plate (11, 21) edge which run in a straight line.
9. The active part as claimed in one of claims 7 or 8, characterized in that the shoulder has a surface which is largely parallel to the plate surface over the majority of the plate extent, and in that the loop (40, 41, 42, 43) is in the form of a rectangle and is supported on the inside by means of one of the rectangular faces on the surface.
10. A surge arrester as claimed in one of claims 1 to 9 having a housing (50) which is composed of insulating material and surrounds the varistor column (30), parts of the connecting fittings (10, 20) and the dielectric loop (40, 41, 42, 43).
11. The surge arrester as claimed in claim 10, characterized in that electrical connections (12, 22) of the fittings (10, 20) are passed out of the housing (50).